REMARKS/ARGUMENTS

This reply is filed in response to the Final Office Action dated March 29, 2005. Applicants thank the Examiner for the opportunity to discuss the rejection of claims 50-52 in the April 29, 2005 telephone interview.

Claims 1-52 are pending. Claims 1-49 stand allowed. Claims 50-52 stand rejected under 35 U.S.C. §102 as being anticipated by Hakkinen et al (WO98/10542) with the Examiner relying on U.S. Patent No. 6,282,185 as being equivalent to the WO98/10542) publication.

As discussed during the interview, Hakkinen et al. reference does not disclose the use of **the same frequency shift being applied to multiple tones** in a pilot tone home hopping sequence from one symbol time period to the next, and therefore does not render obvious any of rejected claims 50-52. The distinctions between the applied reference and claims 50-52 are discussed further in the interview summary which follows.

II. Interview Summary

This interview summary is presented in the format suggested by the Patent Office.

1. **Date of Interview: April 29, 2005**
2. **Type of Interview:** Telephonic
3. **Name of Participants:**
   Examiner: Kevin Michael Burd

Applicants' Reps: Michael P. Straub, Junyi Li

4. **Exhibit(s) Shown:** None

5. **Claims discussed:** Claim 50

6. **References Discussed:** U.S. Patent No. 6,282,185 to Hakkinen et al.

7. **Proposed Amendments discussed: None.**

8. **Discussion of General Thrust of the Principal Arguments**

Applicants suggested that the Examiner review Fig. 4 which provided support for claims 50-52.

During the interview it was argued that claim 50 was directed to a system wherein a base station used at least one pilot tone hopping sequence which included multiple tones and where **the tones** used in the pilot hopping sequence during a portion of time **changed by a frequency shift** corresponding to a fixed number of tones from one symbol time period to the next symbol time period.

As discussed, the applied reference, discloses, in Fig. 2, **using different frequency shifts for different tones**. The same frequency shift is NOT applied to multiple tones of a pilot tone hoping sequence in Hakkinen et al. The use of different frequency shifts for individual tones is apparent from the fact that the slope of each of the lines shown in Fig. 2 of Hankkinen et al. are different.

9. **Other Pertinent Matters Discussed**: None

10. **General Results/Outcome of Interview**

The Examiner indicated that the applied reference, at least with respect to Fig. 2 did not seam to indicate using the same frequency shift for multiple tones in a hopping sequence. The Examiner agreed to reconsider the rejection in view of Applicants' argument upon submission of a written response.

III. Claims 50-52 are Patentable

Claim 50 is patentable since the applied reference does not show the same frequency shift to multiple tones of a hopping sequence which includes multiple tones per symbol transmission time period.

In particular claim 50 is patentable because it recites:

> An orthogonal frequency division multiplexing (OFDM) based spread spectrum multiple access wireless system comprising:
> at least two adjacent base stations, each one of the adjacent base stations transmitting pilot tones according to one of a plurality of different pilot tone hopping sequences over at least a portion of a pilot sequence transmission time period, said portion including multiple symbol time periods, **at least one of the different pilot tone hopping sequences including *at least two pilot tones per symbol time period*** which are separated from one another by at least one tone during said portion of said pilot sequence transmission time period, in each

of the different pilot tone hopping sequences the number of pilot tones used in each successive symbol time period in said portion of said pilot sequence transmission period being the same but ***the tones* used in a symbol time period by any one of the different pilot tone hopping sequences changing in frequency from one symbol time period to the next symbol time period by *a frequency shift* corresponding to a fixed number of tones**, adjacent base stations using different frequency shifts to generate pilot tone hopping sequences with different pilot tone slopes which can be determined from the frequency shift of the pilot tones used in consecutive symbol time periods; and

a mobile communications device including:

i) a receiver for receiving one or more of said plurality of different pilot tone hopping sequences; and

ii) means for determining the pilot tone slope of a received pilot tone hopping sequence.

Claims 51-52 are patentable for the same general reasons that claim 50 is patentable.

IV. Conclusion

In view of the above remarks, it is respectfully submitted that the pending claims are patentable over the applied references and are the application is now in condition for allowance.

Respectfully submitted,

May 3, 2005

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I hereby certify that this paper (and any accompanying paper(s)) is being facsimile transmitted to the United States Patents and Trademark Office on the date shown below.

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Michael P. Straub May 3, 2005